

Create ICC for Linearization with PhotoShop ACV curves

Photoshop Color Settings: Adobe RGB, Gray Gamma 2.2
Create the ACV files as usual.

Print step wedge as usual:

Set Mode: RGB (make sure source profile is gg 2.2 so rgb is just $r=g=b$ =gray values).

Read step wedge as usual creating a .txt file with the Lab data.

To get the acv data into full 16 bit with PS's curve algorithms:

Open rgb-raw-16.psd

-- this is simply anRGB file with all 256 gray values in 16 bit.

Adjust Curves and apply the ACV from above.

The usual strange colors are normal.

Save As a Photoshop Raw format. Use a name with .raw extension.

Options: Header = 0, Interleaved Order,
Byte Order = native to your machine
Make sure you don't overwrite the original file.

Select both the .txt data file and the .raw file

(control Click lets you select more than one file).

Drag the pair of files to the QTR-Create-ICC-RGB.exe

You should see the same linearize info page and a new icc file. name-rgb.icc
Use this icc file for both printing and soft-proofing.

One limitation for this method is that at least one of the RGB curves in the .acv must be monotonically increasing i.e. without reversals or flat spots. (Actually the print side is ok the soft-proof will be all black). A workaround for this is to make a separate icc profile just for the soft-proofing -- i.e. just a profile made without the ACV data.